

**Distributional Notes on *Apamea acera* (Smith) with Discussion
of the Type Specimen**
(Lepidoptera: Noctuidae)

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Until recently, *Apamea acera* (Smith) has been rare in collections and has been confused with *Apamea maxima* (Dyar). Draudt, in Seitz (1923), states that it is a very rare species in Washington. Rarity of this species seems to have been the case since the original description. To date, the United States National Museum possesses only the female type, and a few specimens from different localities in Utah, as well as a female donated by the author.

The original description by Smith is adequate and need not be amended at this time. The colored illustration in Seitz (1923) is fair, the color being only slightly off true. Perhaps the best illustration is that of Barnes and McDunnough (1912), but their photograph is of a worn specimen. There is discrepancy in their statements pertaining to this specimen also: "This specimen has been compared with the type specimen. The type locality is Pullman, Washington." If they compared their specimen to the "type" which we must regard as the specimen bearing the U.S.N.M. label 4826 they must have stated the type locality incorrectly, or they merely compared their specimen to the cotype male. Perhaps they disregarded Smith's original description, as he stated "Type.—Cat. No. 4826, U.S.N.M."

Hampson (1909) described *Andropolia acera* ". . . from a drawing from type in Coll. J. B. Smith." In reality, the specimen in the Smith collection was the male, and should only be considered as a type of lesser degree, as it is the female specimen from Seattle, Washington, that bears the U.S.N.M. type number 4826, and is contained in the United States National Museum. The color in both wings is off true and the thorax is far too contrasting when one compares the disc to the tegulae.

It is peculiar that the female is designated the type specimen, as it is not the better of the two specimens as far as the maculation is concerned. Smith treated the male first in all conditions where the sexes were considered separately, *e.g.*, expanse, habitat, and discussion. In his discussion, he stated "One pair only, the male in good condition save that it lacks antennae; the female, which is much older, somewhat



FIG. 1. (upper). *A. acera*, male. Homotype, E. L. Todd; Mount Ingalls, Plumas County, California, elevation 8,732 feet, 11 July 1964 (W. R. Bauer, J. S. Buckett, M. R. Gardner). FIG. 2 (lower). *A. acera*, female, same data as preceding.

defective.” It seems most logical that Smith would describe a species basing it on the best specimen of two, particularly where one of the two was “much older” and “somewhat defective.” Perhaps at one time both cotypes possessed the U.S.N.M. Cat. No. 4826 and subsequently the male may have lost the “Cat. No. 4826” label.

Between 1962 and 1964, specimens of *A. acera* were collected in California, primarily in Plumas County. Before this time, the author had seen very few, if any, “fresh” specimens of *A. acera*. The flight period is from mid-July to mid-September, with the majority of the specimens collected the latter portion of July and the first part of August.

Apamea acera is apparently widely distributed, specimens having been collected from central California north into Washington, and

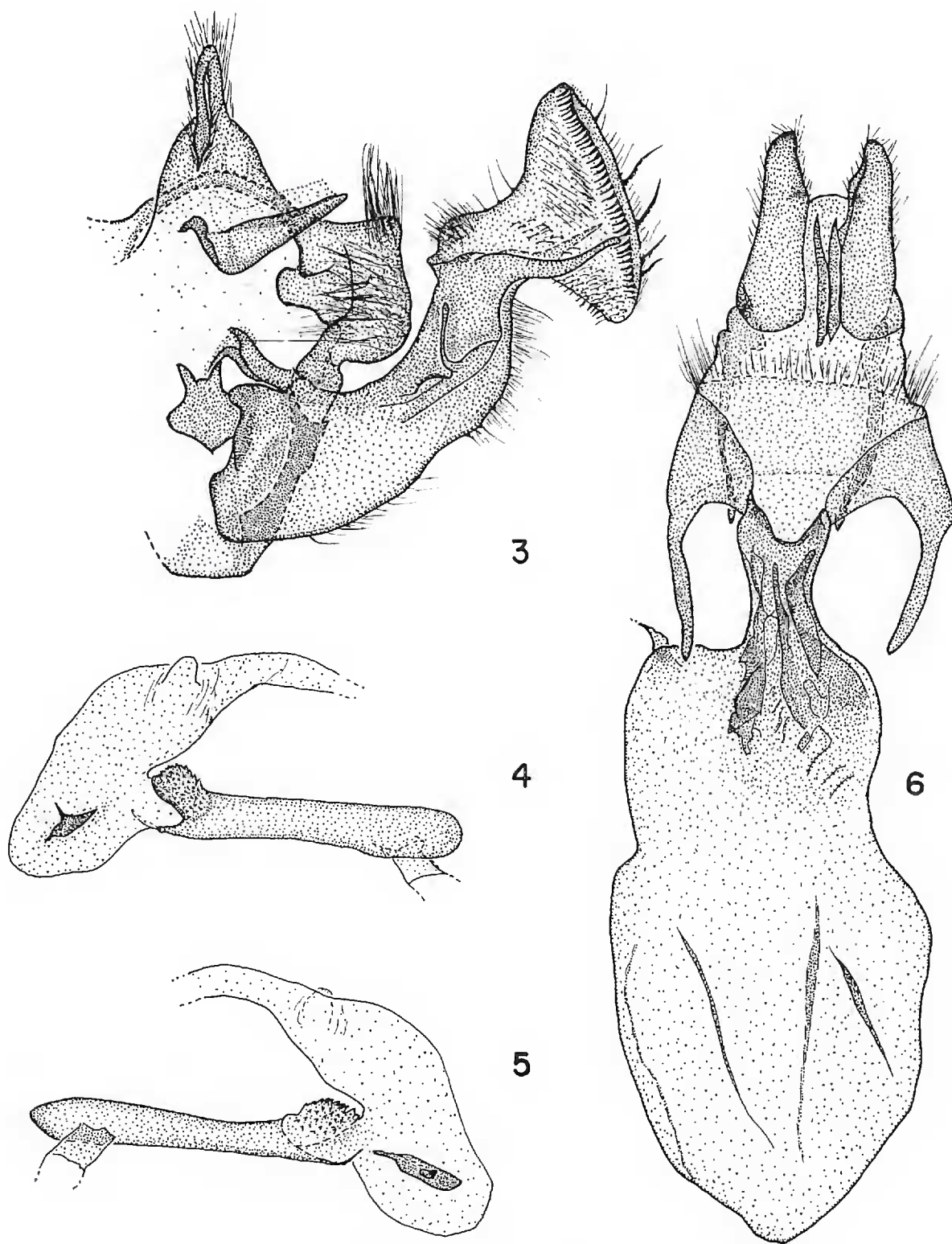


FIG. 3. *A. acera*, male genitalia minus aedeagus. Johnsville, Plumas County, California, 1 August 1964 (H. J. Pini). Bauer-Buckett slide No. 64I26-1. FIG. 4. *A. acera*, lateral aspect of aedeagus illustrating one of the two vesical cornuti. FIG. 5. *A. acera*, lateral aspect of aedeagus illustrating one of the two vesical cornuti (opposite side of vesical sac than that of Fig. 4). FIG. 6. *A. acera*, female genitalia. Johnsville, Plumas County, California, 9 August 1964 (H. J. P.). Bauer-Buckett slide No. 64I26-2.

eastward into Utah. Perhaps one of the factors contributing to its more frequent capture in the past 2 years is the use of fluorescent black light, coupled with continuous collecting (as is done at Johnsville, Plumas County, California by Mrs. Helena Pini).

Both the male and the female genitalia are illustrated, and photographs were taken of the adults (Figs. 1-6). The greatest expanse of the forewing varies from 20 mm to 24 mm. The specimens examined are from the American Museum of Natural History, New York City; the Bauer-Buckett collection, Davis; California State Department of Agriculture, Sacramento; University of California, Davis. Dr. E. L. Todd kindly supplied data on the type and on additional specimens contained in the United States National Museum, and compared specimens with the type. Dr. Frederick H. Rindge kindly supplied exact data on the specimens contained in the American Museum of Natural History. The specimens examined are as follows:

CALIFORNIA.—One female, Inspection Station, 6 miles north Alturas, Modoc County, 6 August 1964 (A. Miller); two females, same locality as preceding, 18 August 1963 (A. M.); one female, Calaveras Big Trees State Park, Calaveras County, 11 August 1949 (W. R. Bauer); one female, Graeagle, Plumas County, July 1958 (Mr. Flannagen); one female, Hornbrook Inspection Station, Siskiyou County, 13 August 1964 (D. Douglas); one male, one female, Johnsville, Plumas County, 15 July 1964 (Helena J. Pini); two females, same locality as preceding, 20 July 1964 (H. J. P.); two males, three females, one male, same data as preceding (Bauer-Buckett slide No. 64I26-1); two males, three females, same locality as preceding, 9 August 1964 (H. J. P.); one female, same data as preceding (Bauer-Buckett slide No. 64I26-2); one male, same locality as preceding, 10 August 1962 (J. S. Buckett); one female, Miami Ranger Station, Mariposa County, 23 July 1946 (H. P. Chandler); one male, Mohawk, Plumas County, July 1949 (Iva Winter); two males, three females, Mount Ingalls, Plumas County, 11 July 1964 (W. R. B., J. S. B., and M. R. Gardner); one female, 4 miles west Pinecrest, Tuolumne County, 16 July 1961 (J. G. Rozen). IDAHO.—One male, Wallace, Shoshone County, 24 July 1938 (O. Huellemann). NEVADA.—One male, Zephyr Cove, Douglas County, 11 September 1963 (Bobbie Ellis). UTAH.—One male, 17 miles east Mayfield, Sanpete County, 20 July 1960, elevation 10,200 feet (F., P., and B. Rindge); one male, Provo Canyon, Utah County (T. Spalding). WASHINGTON.—One male, Pullman, Whitman County (C. V. Piper), bearing the label "*Polia acera* Smith ♂ Type"; one female, Seattle, King County (U.S.N.M. Type No. 4826).

LITERATURE CITED

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